**BRUHAT BANGALORE MAHANAGARA PALIKE**
YELHANKA ZONE ELECTRICAL DIVISION

Office of the Executive Engineer
Electrical Division, Yelahanka Zone
Bruhath Bengaluru Mahanagara Palike

"Schedule-B"

**Name of Work:-**Upgradation and Improvements to hebbala Electrical Crematorium Furnace -1 in Ward no. 7 Yelahanka Zone.

| Sl. No. | Approved Qty | Description | Unit | Approved Rates | |
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| | | | | in Figures | In Words |
| 1 | 90 | Supplaying & Fixing of Coil holding bricks Vertical System 115X115X300 mm | Nos | 2200.00 | Rupees Two Thousand Two Hundred Only |
| 2 | 2500 | Supplaying & Fixing of Insulation bricks std 75X115X225mm | Nos | 84.00 | Rupees Eighty Four Only |
| 3 | 1350 | Supplaying & Fixing of Refractor STD IS 6 75X115X225mm | Nos | 86.00 | Rupees Eighty Six Only |
| 4 | 1350 | Supplaying & Fixing of Refractor STD IS 8 75X115X225mm | Nos | 102.00 | Rupees One Hundred Two Only |
| 5 | 200 | Supplaying & Fixing of Refractor side arch bricks 230X115X75/65mm | Nos | 104.00 | Rupees One Hundred Four Only |
| 6 | 35 | Supplaying & Fixing of Refractoy slabs MCL 150X300X600mm | Nos | 6200.00 | Rupees Six Thousand Two Hundred Only |
| 7 | 30 | Supplaying & Fixing of Refractoy slabs MCL 150X300X450mm | Nos | 5600.00 | Rupees Five Thousand Six Hundred Only |
| 8 | 8 | Supplaying & Fixing of Body laying with MCL 150X300X600mm | Nos | 11600.00 | Rupees Eleven Thousand Six Hundred Only |
| 9 | 17 | Supplaying & Fixing of Refractor cement Fine ACC 50(50 kg bag) | Bags | 3200.00 | Rupees Three Thousand Two Hundred Only |
| 10 | 14 | Supplaying & Fixing of Refractor cement FIR crate super (50 kg bag) | Bags | 5200.00 | Rupees Five Thousand Two Hundred Only |
| 11 | 4 | Supplaying & Fixing of Refractoy cement white heat K Acc make | Bags | 6200.00 | Rupees Six Thousand Two Hundred Only |
| 12 | 1 | Supplaying & Fixing of Acoustic set liquid bind | drum | 6800.00 | Rupees Six Thousand Eight Hundred Only |
| 13 | 13 | Supplaying & Fixing of FIBT blank kit 96 grade | Box | 4600.00 | Rupees Four Thousand Six Hundred Only |
| 14 | 2 | Supplaying & Fixing of FIBT blank kit 128 grade | Box | 6200.00 | Rupees Six Thousand Two Hundred Only |
| 15 | 50 | Supplaying & Fixing of SS Stud 304X250X10m | Nos | 280.00 | Rupees Two Hundred Eighty Only |
| 16 | 12 | Supplaying & Fixing of FIR clay cement | Bags | 1200.00 | Rupees One Thousand Two Hundred Only |
| 17 | 8 | Supplaying & Fixing of Refractoy slabs IS8 100X300X600mm | Nos | 3800.00 | Rupees Three Thousand Eight Hundred Only |

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 010

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ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

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| 18 | 17 | Supplaying & Fixing of Refractoy slabs IS8 100X300X450mm | Nos | 2800.00 | Rupees Tw Thousand Eig Hundred Only |
| 19 | 18 | Supplaying & Fixing of 3.5 KW Heating coils Made out of 5.8mm Thick 80/20 Grade nickel chromium wire, Heating Zone should be 950mm length, End terminal rod ss 304Grade 10mm dia 550mm Lenth suitable for Verticle mounting system in Electrical Furnace including Porcelin beeds spacers Supporting system Complet | Nos | 37000.00 | Rupees Thirty Seven Thousand Only |
| 20 | 1 | Labour charges for Removing and relining works | job | 80000.00 | Rupees Eighty Thousand Only |
| 21 | 40 | Supplaying & Fixing of Coil connecting to used to coper flat 25X4 mm | kgs | 1500.00 | Rupees One Thousand Five Hundred Only |
| 22 | 30 | Supplaying & Fixing of Epoxy insulators (bus bar mounting) | Nos | 80.00 | Rupees Eighty Only |
| 23 | 1 | 1) Furnace top fabrication works with MS angle and channel with covering sheets | job | 120000.00 | Rupees One Lakh(s) Twenty Thousand Only |
| 24 | 1 | 2) Furnace main door work front sheet repalcement 5 mm thickness, guiding wheel (4 Nos) with shaft including bearing repalcement and mechanism servicing | Set | 66000.00 | Rupees Sixty Six Thousand Only |
| 25 | 1 | 2) Furnace back door Ash removing doors Newly fabricated. | | 70000.00 | Rupees Seventy Thousand Only |
| 26 | 1 | 3) Body charging trolley servicing and repair works | job | .20000.00 | Rupees Twenty Thousand Only |
| 27 | 1 | fabrication, Supplay ,erection & commissioning of Exhaust Blower. Following specifications, 7.5 Hp,1440 RpM 3Phase Induction Motor (ABB make ) Centrifugal belt driven 50mm SS310 Shaft heavy duty 2Nos ball bearing, Motor & Blower Mounting frame 75x50 mm C Chanel, Implers & Outer body 310SS 5 mm Thick With Matching Flanges Air in let & out let Opening300mm, | Set | 472312.00 | Rupees Four Lakh(s) Seventy Two Thousand Three Hundred Twelve Only |
| 28 | 1 | Supplay & Erection of 1/2 Hp 3Phase 50 cycles 1440 RPM Flange Mounting Motor with Gear Out put 10 RPM | Set | 49500.00 | Rupees Forty Nine Thousand Five Hundred Only |
| 29 | 1 | **Scrubber work-** SS fabricated 304 sheet 3x3x3 feet 3mm thickness, water tank, using 40x40x5 mm iron L angle -30 mtrs SS flat:40x5 : 25 mtrs ; SS pipe 2: 6 mtrs; Gate valve 2;4 Nos; Elbow 2" : 8 Nos; 2" flange: 8 Nos; ¾" pipe: 12mtrs; ¾" flange: 8 Nos; ¾" Bend : 8 Nos Reducer ¾" 4 Nos Water pump 3 phase 1 HP 1 ½" x 1 ½": 2 Nos. (Momoblock pump), including of labour, diamantling erection and commission of all the above work. | Set | 195000.00 | Rupees One Lakh(s) Ninety Five Thousand Only |
| 30 | 5 | SS Fabrication 2 mm thick, 500 mm dia with flange. (blower to Chimney connecting pipe) | Mtrs | 29500.00 | Rupees Twenty Nine Thousand Five Hundred Only |
| 31 | 4 | SS Fabrication 2 mm thick, 250 mm dia with flange. (blower to Chimney exhausting pipe) | Mtrs | 15600.00 | Rupees Fifteen Thousand Six Hundred Only |
| 32 | 6 | SS fabrication 2 mm thick, 300 mm dia with flange. (by-pass lining work) | Mtrs | 21250.00 | Rupees Twenty One Thousand Two Hundred Fifty Only |
| 33 | 6 | Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.225-250Amps | Nos | 17801.00 | Rupees Seventeen Thousand Eight Hundred One Only |

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| 34 | 6 | Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. ( Icu = Ics) Four POLE.320-250Amps 35kA. | Nos | 16327.00 | Rupees Sixteen Thousand Three Hundred Twenty Seven Only |
| 35 | 4 | Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS-13947.200Amps | Nos | 6262.00 | Rupees Six Thousand Two Hundred Sixty Two Only |
| 36 | 12 | Supplying and fixing HRC fuse link on existing switch fuse base with watt loss as per IS-13703.200Amps | Nos | 552.00 | Rupees Five Hundred Fifty Two Only |
| 37 | 6 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.40-63 Amps SP | Nos | 677.00 | Rupees Six Hundred Seventy Seven Only |
| 38 | 4 | 40-63Amps TPN | Nos | 1936.00 | Rupees One Thousand Nine |
| 39 | 2 | Supplying of multi function digital meter with three line back light LCD type display for voltage, Current, frequency, Power, power factor, KVA, KWH,KVAR suitable for 3 phase, 4 wire LT network with IP 54 degree of protection and completely wired as required with communication Port and Class 0.5s accuracy. | Nos | 8003.00 | Rupees Eight Thousand Three Only |
| 40 | 3 | Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C. 50 Hz 12/24v D.C. | Nos | 442.00 | Rupees Four Hundred Forty Two Only |
| 41 | 6 | Supplying, fixing and wiring 3 Phase Digital Ammeter /Voltmeter. | Nos | 1224.00 | Rupees One Thousand Two Hundred Twenty Four Only |
| 42 | 3 | Supplying, fixing and wiring 1000/5A to 1600/5A 15VA Burden class 1 Current Transformer. | Nos | 720.00 | Rupees Seven Hundred Twenty Only |
| 43 | 2 | Supplying, fixing and wiring rotary selector switch suitable for Ammeter. | Nos | 172.00 | Rupees One Hundred Seventy Two Only |
| 44 | 2 | Supplying, fixing and wiring rotary selector switch suitable for Voltmeter. | Nos | 140.00 | Rupees One Hundred Forty Only |
| 45 | 9 | Supplying and fixing HRC fuse units base on existing switch/panel board.up to 32Amps | Nos | 174.00 | Rupees One Hundred Seventy Four Only |
| 46 | 390 | Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A.1.5 sqmm | Mtrs | 18.60 | Rupees Eighteen And Paise Sixty Only |
| 47 | 490 | 2.5 sqmm | Mtrs | 29.20 | Rupees Twenty Nine And Paise Twenty Only |
| 48 | 40 | 16 sqmm | Mtrs | 171.00 | Rupees One Hundred Seventy One Only |

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| 49 | 3 | Supplying ..... amps rated 3phase with neutral bus bar using required capacity electrolytic aluminum strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.100Amps 4x30x6mm Aluminum Strips | Mtrs | 2135.00 | Rupees Two Thousand One Hundred Thirty Five Only |
| 50 | 2 | Fixing of ..... Amps TPST / change over switch / Contactor along with neutral link with screws, bolts, nuts and wiring using required capacity wires and circuit labeling.100A to 250A TPST | Nos | 387.00 | Rupees Three Hundred Eighty Seven Only |
| 51 | 100 | Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.3.5 core 25 sqmm | Mtrs | 165.50 | Rupees One Hundred Sixty Five And Paise Fifty Only |
| 52 | 100 | 3.5 core 50 sqmm | | 265.00 | Rupees Two Hundred Sixty Five Only |
| 53 | 200 | Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure.25 sqmm to 75 sqmm | | 16.20 | Rupees Sixteen And Paise Twenty Only |
| 54 | 2 | LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools.<br><br>LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts | Nos | 18720.00 | Rupees Eighteen Thousand Seven Hundred And Twenty Only |

**I am prepared to take up the above work at the rates mentioned in the Schedule B**

Contractor

EXECUTIVE ENGINEER-4
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EXECUTIVE ENGINEER (ELEC)
BBMP, Yelahanka Zone